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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/657,758 Filing Date: September 08, 2003 Appellant(s): PRIEM, DAN G.

Suneel Arora Registration No 42, 267 For Appellant

EXAMINER'S ANSWER

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This is in response to the appeal brief filed 03/31/06 appealing from the Office action mailed 11/08/05.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

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(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

A substantially correct copy of appealed claims 7, 8, 9, 10, 11, 12, 13, 14, 15, 21, 23, 24, 26, 28, 32 appear on page 25-28 of the Appendix to the appellant's brief. The minor errors are as follows: Such claims contain <u>underlined</u> limitations that were not entered in the After Final Amendment.

(8) Evidence Relied Upon

4,182,960	Reuyl	1-1980
5,333,703	James et al	8-1994
6,700,214	Ulinski et al	3-2004
5,276,624	Ito et al	1-1994
5,954,040	Riedel	9-1999
6,534,958	Graber et al	3-2003
5,432,413	Duke et al	7-1995
4,961,403	Kawaguchi et al	10-1990

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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

(a) Claims 1, 5, 7, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuyl (US 4,182,960) in view of James et al (US 5,333,703).

Reuyl discloses an actuator 46 for starting a generator 26" automatically (see figure 1; column 4, line 36, 37) and a logic circuit 48 coupled to sensor 64 and actuator 46 (see figure 1).

However, Reuyl does not disclose detecting a fault condition base on exhaust hazard.

On the other hand, James et al teaches that it is well known for the purpose of monitoring efficiently carbon monoxide levels, a sensor circuit for detecting a risk of exhaust hazard and disabling a device when a risk of exhaust hazard is

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present (column 5, lines 11-14). Moreover, a transmission position detector is disclosed (column 11, lines 45-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a system as disclosed by Reuyl and to use the teachings of James et al for the purpose of monitoring efficiently carbon monoxide levels to disable a device if there is a risk of exhaust hazard.

(b) Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuyl and James et al as applied to claim 1 above, and further in view of Ulinski et al (US 6,700,214).

The combined system discloses all of the elements above. However, the combined system does not disclose explicitly having an automatic circuit with a load sensor.

On the other hand, Ulinski et al discloses for the purpose of providing efficiently high power, load sensors 224, 234, which are used for indicating a need for power from the generator (column 7, line 64 – column 8, line 9; column 8, lines 8-11; column 8, line 65 – column 9, line 6).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to

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modify the invention by using load sensors for the purpose of providing efficiently high power as disclosed by Ulinski et al.

(c) Claims 9, 13, 23, 26, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuyl and James et al as applied to claims 1 and 20 above, and further in view of Ito et al (US 5,276,624).

The combined system discloses all of the elements above. However, the combined system does not disclose explicitly having a wheel detector sensor.

On the other hand, Ito et al discloses for the purpose of eliminating speed changing shocks, wheel rotation sensors 66a, 66b.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to modify the invention by using wheel detector sensors for the purpose of eliminating speed changing shocks as disclosed by Ito et al.

(d) Claims 8, 11, 12, 14, 15, 22, 25, 27, 30, 31, 32, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuyl and James et al and Ito et al as applied to claims 1, 20, 23, 28 above, and further in view of Riedel (US 5,954,040).

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The combined system discloses all of the elements above. However, the combined system does not disclose explicitly having an engine sensor, rpm sensor and exhaust sensor.

On the other hand, Riedel discloses for the purpose of controlling more efficiently an engine, an engine operation sensor, rpm sensor 110, exhaust sensor 155, 145.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to modify the invention by using several sensors for the purpose of controlling more efficiently an engine as disclosed by Riedel.

(e) Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reuyl and James et al as applied to claim 1 above, and further in view of Graber et al (US 6,534,958).

The combined system discloses all of the elements above. However, the combined system does not disclose explicitly having a spark-ignited generator.

On the other hand, Graber et al discloses for the purpose of maintaining a constant output power regardless of operation conditions a spark-ignited generator (see figures 9, 10).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to modify the invention by using a spark-ignited generator discloses for the purpose of maintaining a constant output power regardless of operation conditions as disclosed by Graber et al.

(f) Claims 10 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuyl and James et al and Ito et al as applied to claims 1 and 23 above, and further in view of Duke et al (US 5,432,413).

The combined system discloses all of the elements above. However, the combined system does not disclose using a reluctance sensor.

On the other hand, Duke et al discloses for the purpose of conserving fuel efficiently that reluctance sensors are widely used in vehicles that sensor 56 is a reluctance sensor.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to modify the invention by using a reluctance sensor for the purpose of conserving fuel efficiently as disclosed by Duke et al.

(g) Claims 6, 16, 17, 18, 19 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reuyl and James et al as applied to claim 1 above, and further in view of Kawaguchi et al (US 4,961,403).

The combined system discloses all of the elements above. However, the combined system does not disclose explicitly coupling a generator to a recreational vehicle.

On the other hand, Kawaguchi et al discloses for the purpose of reducing engine and generator vibration, coupling a generator 20 to a recreational vehicle 12 (see figure 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the combined system as disclosed above and to modify the invention by coupling a generator to a recreational vehicle for the purpose of reducing engine and generator vibration as disclosed by Kawaguchi et al.

(10) Response to Argument

With respect to claims 1, 5, 7, 20, 21:

(a) In response to applicant's argument that the Reuyl reference and James et al reference do not disclose a prima case of obviousness, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into

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the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Moreover, Reuyl discloses an automatic starter 46 (column 4, line 36, 37) for generator 26" (column 4, lines 36, 37; column 6, lines 7-11) and further discloses turning off the generator 26 (column 5, lines 50, 51) and disabling the starting circuit (column 6, lines 55-57).

It is disclosed by Reuyl that the engine 26 is a combustion engine (column 3, line 61), thus such engine produces exhaust hazard.

The James et al reference was mainly used to show that it is common to disable a machine/circuit based on risk of exhaust hazard. James et al discloses using sensing devices (column 3, lines 19-21, 38-40), which inherently are attached to logical devices (column 4, lines 29-67) and further teaches that it is known to disable a machine (column 3, lines 24-26), more specifically, an engine based on high concentration of exhaust hazard (column 5, lines 11-14) by using the sensing and logical devices (see figures 4A, 6). Respectfully, in order to turn or disable a

machine, control signals must be sent to an actuator circuit, which is what James et al teaches (see figure 1, elements 1, 100, 154, 151 & figure 4A).

- (b) In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Reuyl teaches using sensors, logic devices and actuating devices for starting a generator and James et al also teaches using sensors, logic devices and actuating devices when an exhaust hazard is present. Both references deal with vehicles and use combustion engines and also address the problem of dealing with exhaust hazards (see Reuyl, column 10, lines 13, 14; see James et al, see abstract).
- (c) In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

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(d) In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPO 209 (CCPA 1971).

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(e) In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., recognition of a potential hidden CO hazard of an engine that is not yet running; inhibiting the automatically starting the fuel powered AC generator) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

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- With respect to claims 5, 7 and 21:

Reuyl teaches that a load can be, partially, ac loads (column 4, lines 61; column 8, lines 43, 44; see figure 1) and that a transmission position detector is disclosed (see James et al, figure 1, element 127, "Park, Neutral").

It is noted, in claim 7, that the Applicant's Representative makes a strong reliance on limitations that are not in the claims nor such limitations were entered in the After Final Amendment (e.g. using the "circuit to inhibit the automatically starting the fuel-powered AC generator).

- With respect to claims 2 and 4, such claims disclose a load power sensor and using a diesel generator.

Ulinski teaches using load sensors 224, 234 being used in conjunction with a generator (column 7, line 64 – column 8, line 9) and further teaches that engine 264 in figure 1B can be a diesel machine (column 11, lines 13 – 35).

It is noted with respect to claims 2 & 4 that the Applicant's Representative makes a strong reliance on limitations that are not in the claims nor such limitations were entered in the After Final Amendment (e.g. using the "inhibiting automatic starting of a diesel generator).

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- With respect to claims 9, 13, 23, 26, 28, 29, Ito et al discloses using a wheel sensor 66a, 66b and a key ignition position sensor (column 9, lines 55, 57, 58, 62 – 68).

It is noted, again, with respect to claims 9, 13, 23, 26, 28, 29 that the Applicant's Representative makes a strong reliance on limitations that are not in the claims nor such limitations were entered in the After Final Amendment (e.g. "inhibit the automatically starting the fuel-powered AC generator when fault condition indicates that the risk of an exhaust hazard is present" & determining whether the vehicle is moving or stopped).

- With respect to claims 8, 11, 12, 14, 15, 22, 25, 27, 30, 31, 32, 33, 34, such claims mainly disclose various types of sensors used in the industry and a data link. Riedel discloses using a data link (see figure 1), a rpm sensor 110, exhaust sensor 145, vehicle engine operation sensor (column 3, lines 19 – 21) and carbon monoxide sensor 155 (see figure 1).

It is noted, again, with respect to claims 8, 11, 12, 14, 15, 22, 25, 27, 30, 31, 32, 33, 34 that the Applicant's Representative makes a strong reliance on limitations that are not in the claims nor such limitations were entered in the After Final Amendment (e.g. "provide a data link used to inhibit the automatically starting the fuel-powered AC generator").

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- With respect to claim 3, see Grounds of Rejection above.

- With respect to claims 10 and 24, Duke teaches that it is well known in the art to use reluctance sensors in generators/engines (column 7, lines 45, 46).

It is noted, again, with respect to claims 10 and 24 that the Applicant's

Representative makes a strong reliance on limitations that are not in the claims nor

such limitations were entered in the After Final Amendment (e.g. using the

reluctance sensor "to inhibit the automatically starting the fuel-powered AC

generator").

- With respect to claims 6, 16, 17, 18, 19, see Grounds of Rejection above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer. Art Unit: 2834

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

JCG

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